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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,499	11/19/2001	Tsuyoshi Asano	990891A	8570

23850 7590 04/21/2004

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EXAMINER

HEITBRINK, JILL LYNNE

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A9

Office Action Summary**Application No.**

09/988,499

Applicant(s)

ASANO, TSUYOSHI

Examiner

Jill L. Heitbrink

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,11,12,14 and 29 is/are allowed.
- 6) ☒ Claim(s) 2,5-10,13 and 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Priority

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Japan on Dec. 25, 1997 and April 27, 1998. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter. Note that applicant has not claim priority to PCT/JP98/05962. It is noted that this application appears to claim subject matter disclosed in prior Application No. PCT/JP98/05962, filed Dec. 25, 1998. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during

Art Unit: 1732

the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Drawings

4. The drawing replacement sheet was received on Jan. 13, 2004. This drawing is approved by the examiner.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5-10, 13 and 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama et al. (Offenlegungsschrift 19646432 equivalent to U.S. Pat No. 6,187,229) taken together with Kopernicky Pat. No. 4,632,564.

7. Takayama discloses an injection molding apparatus and process with a gas feeder 37a for feeding at least gas into the injection screw barrel at a location opposite the injection nozzle, a resin pellet feeding passage 37 for feeding resin pellets into the injection molding apparatus, a pellet exhaust gas passage 50 for passing moisture and exhaust gas which are generated when the resin pellets melt in the injection molding apparatus and a decompressor, vacuum 50a, connected to the exhaust gas passage for exhausting the moisture and the exhaust gas from a pellet feeding passage side to an outside of the injection molding apparatus. Kopernicky teaches the use of a feeding regulator and an exhaust in the feeding passage for an injection molding apparatus. It would have been obvious to a person of ordinary skill in the art to combine the pellet feeder of Kopernicky with Takayama so as to provide the desire amount and condition of the feed pellets to the injection molding apparatus. The amount of decompression of the decompressor would clearly depend upon the distance between the decompressor

Art Unit: 1732

and the injection molding barrel since the decompressor would have been operated such as to remove the exhaust gases and moisture.

Allowable Subject Matter

8. Claims 1, 3, 4 and 29 are allowed. The prior art does not teach the resin pellet feeding passage spaced from the air mouth feed, and the air mouth feed being at an end opposite the die end of the injection molding machine.

9. Claims 11, 12 and 14 are allowed. The prior art does not teach a device for automatically feeding pellets with a vacuum interception valve to intercept a passage between a pellet storage tank and other pellet storage.

Response to Arguments

10. Applicant's arguments filed Dec. 30, 2003 have been fully considered but they are not persuasive.

11. Applicant states that when the application was filed November 19, 2001, a reference to the prior application was properly inserted in the specification. The Examiner has checked the transmittal document, oath and first page of the specification and cannot find any reference to prior Application No. PCT/JP98/05962, filed Dec. 25, 1998. Applicant's has not met the requirements of claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Japan on Dec. 25, 1997 and April 27, 1998 since the United States application (CIP 09/367,936 filed Aug. 24, 1999) was filed more than twelve months thereafter.

Art Unit: 1732

12. Applicant argues that a decompressor connected to the exhaust gas passage for exhausting the moisture and exhaust gas from the pellet feeding passage side and generated in a die is not taught. However, the vacuum pump 50 in Takayama would be a decompressor removing gas and moisture from the injection molding system.

13. Applicant argues that a detector for detecting an accumulation amount of the resin pellets situated inside a cylinder of the injection molding apparatus is not taught. This would have been obvious in Kopernicky which controls the speed of the motors 34, 118 so as to provide the desired amount of feed. The detecting of the amount would have been required in Kopernicky so as to not over fill the passage.

14. Applicant argues that the prior art does not teach claims 22-25. However, Takayama (vent 50) and Kopernicky (vent 90) teach exhausting, out of the cylinder, exhaust gas and moisture generated when the resin pellets melt in the cylinder as well as air (37a in Takayama) fed from an opposite side to an nozzle of a front end of the cylinder from a pellet feeding side of a pellet feeding zone of the cylinder through a pellet exhaust gas passage by reducing pressure (vacuum).

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


Art Unit: 1732

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is 571-272-1199. The examiner can normally be reached on Monday - Friday 9:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaanni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jill L. Heitbrink
Primary Examiner
Art Unit 1732

jlh